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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,276	04/19/2004	Teruo Koike	ST3001-0042	9916

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EXAMINER	
PAYNE, SHARON E	

ART UNIT	PAPER NUMBER
2875	

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/826,276	KOIKE ET AL.	
	Examiner	Art Unit	
	Sharon E. Payne	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4,5,7,8,17,18,22,23 and 25-30* is/are rejected.

7)☒ Claim(s) *2,3,6,9-16,19-21 and 24* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1105, 0704,1205*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Upon further consideration, the requirement for election is rescinded, and an action based on all of the claims follows.

Claim Objections

2. Claims 8 and 20-25 are objected to because of the following informalities: the word "soas" in line 2 of each claim should be "so as.".

3. Claims 1-25 are objected to due to the following informality: the word "lights" should be "light" in line 7 of claim 1. Appropriate correction is required.

4. Claims 2-7 and 9-19 are necessarily included due to their dependency.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1 and 26-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Amano (U.S. Patent 6,814,475 B2).

Regarding claim 1, Amano discloses a plurality of light sources (reference numbers 28 and 48), a plurality of corresponding reflective surfaces (Fig. 2, top and bottom), wherein each

of the light sources includes at least one LED array with LED chips arranged in a row (Fig. 3, middle), and each of the reflective surfaces is arranged in combination with one of the light sources to generate light beams each having a certain light distribution pattern (Fig. 2, top and bottom), the light sources and reflective surfaces configured such that each of the light beams having a certain light distribution pattern are superimposed with each other to form the predetermined light distribution pattern (Fig. 2, top and bottom).

Concerning claim 26, Amano discloses a light source including a plurality of LED arrays (Fig. 3, middle), each array including a plurality of LED chips formed thereon (Fig. 3, middle), a plurality of reflector surfaces located adjacent the plurality of LED arrays (Fig. 3, top and bottom), each of the reflector surfaces being configured to direct light emitted from one of the plurality of LED arrays into a certain light distribution pattern such that the plurality of reflector surfaces produce a plurality of certain light distribution patterns (Fig. 2), and the plurality of certain light distribution patterns combine to form a predetermined light distribution pattern (Fig. 2).

Regarding claim 27, Amano discloses a light source holder (Fig. 2, middle) located adjacent the plurality of reflectors (Fig. 2) and having a plurality of sides extending in a direction parallel to an optical axis of the LED type lamp (Fig. 3) wherein at least one of the LED arrays is located adjacent at least one of the plurality of sides (Fig. 2, middle).

Concerning claim 28, Amano discloses a light source including an LED chip (reference number 28), a reflector adjacent the light source (Fig. 2, top), a light source holder (Fig. 3, middle portion between the light sources) including a surface that extends along the optical axis of the LED type lamp (Fig. 3, middle) and on which surface the LED chip is oriented such that light emitted from the LED chip is directed towards the reflector (Figs. 2 and 3).

Regarding claim 29, Amano discloses a plurality of LED chips formed in an LED array on the surface of the light source holder (Fig. 3, reference number 28, middle of the figure).

Concerning claim 30, Amano discloses the light source including a plurality of LED chips (reference number 28) and the light source holder including a plurality of surfaces that extend along the optical axis of the lamp (Fig. 3, middle portion in dashed lines), each of the surfaces including at least one of the plurality of LED chips located thereon (Fig. 3, middle) and the reflector including a plurality of different shaped reflective surfaces each corresponding to a different one of the surfaces of the light source holder (Fig. 3, top and bottom).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amano in view of Oyama (U.S. Patent 4,928,214).

Regarding claim 4, Amano does not disclose a shade. Oyama discloses a shade (reference number 35) configured to block a part of light emitted from one of the light sources (Fig. 10) and arranged in the vicinity of said one of the light sources (Fig. 1) and in an optical path extending from one of the light sources to one of the reflective surfaces to form the predetermined light distribution pattern (Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the shade of Oyama in the apparatus of Amano to block undesired light.

Concerning claim 5, Amano discloses a light source holder (Fig. 1, middle, in dashed lines between the light sources) having a longitudinal axis (Fig. 1, middle) and the at least one LED array located adjacent the light source holder (Fig. 1, middle). Amano does not disclose a shade.

Oyama discloses a shade (reference number 35) located in a lateral direction from the light source holder (Fig. 1) and in a direction substantially perpendicular to the longitudinal axis of the light source holder (Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the shade of Oyama in the apparatus of Amano to block undesired light.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Amano in view of Wesson (U.S. Patent 6,371,636).

Regarding claim 7, Amano does not disclose the number of LED chips being turned on as variable. Wesson discloses the vehicle lamp being configured such that the number of the LED chips to be turned on in each LED array can be varied such that the predetermined light distribution pattern can be varied (Figs. 16-17). (The light sources are pulsed, which means that the pattern of the light distribution pattern is being varied from off to on to off and so on.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the controller of Wesson in the apparatus of Amano to produce an aesthetically pleasing strobe pattern. See the short description of Fig. 17 of Wesson.

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Amano in view of EP 1,298,383 A2 (hereinafter "Osram").

Regarding claim 8, Amano does not disclose the LED chips being tilted with respect to the optical axis. Osram discloses the LED array being tilted with respect to the optical axis of the lamp so as to direct light to one of the reflective surfaces (Fig. 6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the configuration of Osram in the apparatus of Amano to achieve the desired light distribution.

11. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amano in view of Oyama as applied to claims 4 and 5 above, and further in view of Wesson.

Regarding claims 17 and 18, Amano and Oyama do not disclose the number of LED chips being turned on as variable. Wesson discloses the vehicle lamp being configured such that the number of the LED chips to be turned on in each LED array can be varied such that the predetermined light distribution pattern can be varied (Figs. 16-17). (The light sources are pulsed, which means that the pattern of the light distribution pattern is being varied from off to on to off and so on.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the controller of Wesson in the apparatus of Amano and Oyama to produce an aesthetically pleasing strobe pattern. See the short description of Fig. 17 of Wesson.

12. Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amano in view of Oyama as applied to claims 4 and 5 above, and further in view of Osram.

Regarding claims 22 and 23 Amano and Oyama do not disclose the LED chips being tilted with respect to the optical axis. Osram discloses the LED array being tilted with respect to the optical axis of the lamp so as to direct light to one of the reflective surfaces (Fig. 6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the configuration of Osram in the apparatus of Amano and Oyama to achieve the desired light distribution.

13. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Amano and Wesson as applied to claim 7 above, and further in view of Osram.

Regarding claims 22 and 23 Amano and Wesson do not disclose the LED chips being tilted with respect to the optical axis. Osram discloses the LED array being tilted with respect to the optical axis of the lamp so as to direct light to one of the reflective surfaces (Fig. 6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the configuration of Osram in the apparatus of Amano and Wesson to achieve the desired light distribution.

Allowable Subject Matter

14. Claims 2, 3, 6, 9-16, 19, 20, 21 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter. Madadi et al. (U.S. Patent 5,688,042) discloses the LEDs on each side of the light source holder, and Amano discloses the other elements of claims 2 and 3. However, no motivation exists to combine the references.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharon E. Payne whose telephone number is (571) 272-2379. The examiner can normally be reached on regular business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sep

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